

TE-PUFPLUS Hi-Vol Calibration Data Form

Site Information

Full Site Name: Burns Harbor - Port of Indiana

Site Abbreviation BHP Sampler Serial No. 1006

Field Technician Name Kate Haile & Katie Healy Date 8/12/21 Time 11:56 CST

Timer/Sensor Checks Allow Temp/Pressure standard to acclimate for 10 minutes before reading.

Is the date correct? ☒ YES NO (circle one)

Is the time within ± 5 minutes of local standard time? ☒ YES NO (circle one)

Temp/Pressure Standard Make/Model: Deltacal DC1

Temp/Pressure Standard Serial No.: 179112 Temp/Pressure Standard Certification Date: 2/2/21

T_{amb} transfer standard ($^{\circ}C$) 28.5 T_{amb} PUFPLUS ($^{\circ}C$) 28.5 (T_{amb} transfer standard - T_{amb} PUFPLUS) = 0 $^{\circ}C$

Is the PUFPLUS Temperature sensor within $\pm 2^{\circ}C$ of the Transfer Standard? ☒ YES NO (circle one)

P_{amb} transfer standard (mmHg) 743.0 P_{amb} PUFPLUS (mmHg) 744 (P_{amb} transfer standard - P_{amb} PUFPLUS) = -1 mmHg

Is the PUFPLUS Pressure sensor within ± 10 mmHg of the Transfer Standard? ☒ YES NO (circle one)

- If both of the above are YES, sensor check is complete. Proceed with flow check.
- If either of the both is NO, use the TE-PUFPLUS Operator's Manual to troubleshoot and retry the sensor check. If the issue persists, add a calibration point to the faulty sensor as described in the SOP in Section 10.2.3. Note that a calibration was done here:

Calibration Orifice Information

Orifice Make/Model: Graseby/Tisch Orifice Serial No.: 62K

Orifice Slope " $m_{orifice}$ ": 10.46067 Orifice Intercept " $b_{orifice}$ ": -0.16706

Orifice Certification Date: 2/4/21

Hi-Vol Calibration Information

Check off each item.

☒ Flow Conditions are set to "STD"?

☒ Flow Rate is set to 225 liters per minute?

Calibration Method: Manual ☒ Automatic (circle one)

Enter $m_{orifice}$ value from above when prompted to "Enter Calibrator Standard m".

Enter $b_{orifice}$ value from above when prompted to "Enter Calibrator Standard b".

☒ Hi Flow Rate should be 247 liters/min

☒ Lo Flow Rate should be 202 liters/min

Correction Coefficient "R" 0.9994 > 0.990 ? ☒ Yes No (circle one)

Hi-Vol Slope " m_{hivol} " (A1) 35.2933 Hi-Vol Intercept " b_{hivol} " (A0) -1.3193

Note: If the Correction Coefficient is ≤ 0.990 , repeat the calibration.

☒ Calibration saved?